

Lyme Disease

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Lyme Disease

Lyme disease is caused by a bacterial infection. In New England it is transmitted by a certain type of tick, commonly called the deer tick (scientific name: *Ixodes scapularis*). In the western U.S., the *Ixodes pacificus* tick transmits it. Lyme disease may cause symptoms affecting the skin, nervous system, heart and/or joints of an individual. Lyme disease was first recognized in 1977 in the United States and in Europe at least 100 years ago. The NH Division of Public Health Services made Lyme disease reportable in October 1990.

Lyme disease gets its name from Lyme, Connecticut where the first cluster of disease cases associated with this infectious agent was observed.

Who gets this disease?

The bacterium that causes Lyme disease is transmitted within the natural cycle of the deer tick, which feed on animals such as mice, opossums, dogs or deer. Certain stages of the tick - especially the nymph and adult - can feed on a human; if the tick is infected with the bacteria it can cause infection in people. Cases of Lyme disease have also been reported in dogs, horses, and cattle. Person-to-person spread of Lyme disease does **not** occur. Also, information available at present indicates that reinfection is possible. This means that if you've had the disease before, you can get it again if infected by a tick. Many persons are bitten by ticks and do not know it, because the ticks are very small and the bite is painless.

What are the symptoms?

The illness usually occurs during the summer months and generally starts as large circular reddish expanding rash around or near the site of the tick bite. (Note: In some cases, a rash may not occur.) Multiple rash sites may occur. During the rash stage, or occasionally prior to the rash, other symptoms such as fever, headache, fatigue, stiff neck and muscle and/or joint pain may be present. These may last for several weeks. If left untreated - within a few weeks to months after the rash onset - complications such as meningitis and heart abnormalities may occur and other body systems may be affected. Swelling and pain in the large joints may recur over many months or years.

How soon do symptoms appear?

Symptoms usually begin within a month of a tick bite, generally 3-32 days.

What is the treatment?

Current therapy includes the use of antibiotics.

How can the spread of this disease be prevented?

Special precautions to prevent exposure to ticks should be used such as wearing light-colored clothing and tucking pants into socks and shirts into pants. Tick repellents containing DEET no higher than 30% concentration should be used sparingly and with care since they may cause adverse reactions in children and some individuals. Tick insecticides containing permethrins should be put on exterior clothes only. (Attention should be given to product warning labels; if in doubt, contact a physician for usage in children.) If exposed to tick-infested areas, family members should check clothing as well as body surface for attached ticks. The control of rodents around the home may be helpful.

How should a tick be removed?

To remove an attached tick, grasp it with one of the tick-removal tools found in stores or fine-tipped tweezers as close as possible to the attachment site (i.e., skin) and pull upward and out with a **firm and steady pressure**. Do not handle the tick with bare hands. Be careful not to squeeze, crush, or puncture the body of the tick, which may contain infectious fluids. After removing the tick, thoroughly disinfect the bite site with alcohol or betadine and wash hands. See or call a doctor if there is a concern about incomplete tick removal.

It is important that a tick be removed as soon as it is discovered. Check after every two or three hours of outdoor activity for ticks attached to clothing or skin. Removing a tick as soon as possible after attachment reduces the risk of transmission of Lyme disease to a human although a minimum of 24 hours of tick attachment is necessary to pass the infection. **Do not** attempt to remove ticks by using Vaseline, lit cigarettes, or other home remedies; doing so may actually increase the chances of contracting a tick-borne disease.

Who should be excluded?

Exclusion is not necessary since the disease is not spread from person-to-person.

Reportable?

Yes. Lyme disease is reportable by New Hampshire law.